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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/699,968	11/03/2003	Florian U. Bomers	5168-001	5026

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EXAMINER	
KEATON, SHERROD L	
ART UNIT	PAPER NUMBER
2174	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/699,968	BOMERS, FLORIAN U.	
	Examiner	Art Unit	
	Sherrod Keaton	2174	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 October 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4 and 6-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4, 6-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *10/24/07*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is in response to the filing of 10-31-2007. Claims 1-4 and 6-22 are pending and have been considered below:

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-4, 6-8, 11-14, and 16-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Davenport et al ("Davenport" US 2004/0263477 A1).

Claim 1: Davenport discloses a computer readable medium storing a computer program comprising:

program instructions to create event translators that translate incoming input events into translated input events according to user-defined translation behaviors(abstract; Page 4, Paragraph 59 and 64);

program instructions to enable a user to associate each event translator with a type of incoming input event (abstract; Page 4, Paragraph 59 and 64); and

program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input

event of the type of incoming input event associated with the event translator, including translation function that modifies incoming input events to one or more configured functions (abstract; Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

Claim 2: Davenport discloses a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to create event translators that translate incoming input events into translated input events according to user-defined translation behaviors comprise program instructions to create one or more operating system hooks to detect event messages associated with incoming input events corresponding to one or more types of computer input devices (Page 4, Paragraph 59). Here inputs are received and translated.

Claim 3: Davenport discloses a computer readable medium storing a computer program of claim 1 above, and further discloses wherein program instructions to create event translators that translate incoming input events into translated input events according to user-defined translation behaviors comprise program instructions to create one or more operating system hooks to receive event messages associated with incoming input events corresponding to one or more types of computer input devices (Page 4, Paragraph 59). Here inputs are received and translated.

Claim 4: Davenport discloses a computer readable medium storing a computer program of claim 1, wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to

receiving an incoming input event of the type of incoming input event associated with the event translator comprises program instructions to define an incoming-to-translated input event mapping that sets the type of translated input event to be generated (Page 4, Paragraph 59).

Claim 6: Davenport discloses a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event translator comprises program instructions to determine whether the incoming input event is swallowed or passed-through (Page 5, Paragraph 66). Here inputs are linked together if need be representing a swallow or pass instruction.

Claim 7: Davenport discloses a The computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event translator comprises program instructions to determine whether the incoming input event causes a one-shot translated input event or causes a repeating translated input event (Page 5, Paragraph 65).

Claim 8: Davenport discloses a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to enable a user to configure a translation behavior for each event translator such that it generates a desired translated input event responsive to receiving an incoming input event of the type of incoming input event associated with the event translator comprises program instructions to determine whether the incoming input event triggers an activation of or a focus shift to a targeted program (Page 5, Paragraph 70-72).

Claim 11: Davenport discloses a method of adapting a computer such that its response to one or more types of input events is modified according to user-configured event translation behavior, the method comprising:

defining one or more event translators, wherein each event translator maps incoming input events of a selected type into translated input events according to a defined translation behavior (Page 4, Paragraph 59 and 64); wherein the defined translation behavior includes modifying one or more event parameters of the incoming input events (Page 5, Paragraph 67)

configuring the defined translation behavior for each event translator based on user input (Page 4, Paragraph 59 and 64); and

detecting incoming input events of the selected types and translating those incoming input events into corresponding translated input events according to the defined translation behaviors of the one or more event translators (Page 4, Paragraph 59 and 64).

Claim 12: Davenport discloses a method of modifying input event behavior in a computer, the method comprising:

defining one or more event translators and associating each event translator with a selected type of incoming input event responsive to input by a user(Page 4, Paragraph 59 and 64);

defining a translation behavior of each event translator responsive to input by a user; including defining a translation function that modifies incoming input events according to one or more user configured functions(Page 4, Paragraph 59 and 64; Page 5, Paragraph 67); and

generating translated input events based on executing associated ones of the event translators responsive to detecting incoming input events of the selected types(Page 4, Paragraph 59 and 64).

Claim 13: Davenport discloses a method as claim 12, wherein generating translated input events based on executing associated ones of the event translators responsive to detecting incoming input events of the selected types comprises:

detecting operating system events associated with the selected types of incoming input events; and for each detected incoming input event of a selected type, translating that incoming input event according to the translation behavior defined the associated event translator or translators(Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

Claim 14: Davenport discloses a computer readable medium storing a computer program, the computer program comprising:

program instructions to enable a user to select a type of input event from a plurality of input event types; program instructions to determine whether a given input event occurring during execution of the computer program matches the selected type of input event; and program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event. (Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

Claim 16: Davenport discloses a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to enable a user to select a type of input event from a plurality of input event types comprise program instructions to enable selection from a plurality of event types include two or more of mouse events, keyboard events, MIDI events, Universal Serial Bus device events, RS-232 serial bus events, game port events, audio input events, analog input events, and infrared port events (Page 4, Paragraph 58 and 64).

Claim 17 : Davenport discloses a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions program instructions to perform a desired

input event translation by processing the given input according to **one or more** input event translation rules if the given input event matches the selected type of input event comprise program instructions to perform one or more of a plurality of translations comprising a re-mapping of the given input event type to one or more other input event types, a time-delay of the given input event, a parameter modification of the given input event, a swallowing of the given input event to hide it from one or more other computer processes, and a swallowing of the given input event to hide it from additional event translation processing (Page 5, Paragraph 66). By linking the two actions it swallows one of initial input actions.

Claim 18: Davenport discloses a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to re-map input events of the selected type into input events of at least one other type (Page 4, Paragraph 59).

Claim 19: Davenport discloses a computer readable storing a program as in Claim 14 above and further discloses wherein said translation function that modifies incoming input events according to one or more user-configured functions comprises program instructions to modify one or more event parameters of input events of the selected type (Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

Claim 20: Davenport discloses a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to time-delay input events of the selected type according to a desired time delay value (Page 5, Paragraph 66). Allows user to change time interval.

Claim 21: Davenport discloses a computer readable medium storing a computer program as in claim 1 above and further discloses wherein including program instructions to define a translation function that modifies incoming input events according to one more user-configured functions comprises including program instructions to modify one or more event parameters of the incoming input events (Page 5, Paragraph 67). A single press is modified to multiple possible actions changing the parameters of that event.

Claim 22: Davenport discloses a computer readable medium storing a computer program as in claim 21 above and further discloses wherein the program instructions to modify one or more event parameters of the incoming input events comprise program instructions to apply a user configured mathematical function at least to selected types of incoming events (Page 5, Paragraph 67). A single press action is modified to multiple possible press actions changing the parameters of that event, this is considered a mathematical function because it takes a single input and adds multiple input actions to that single input.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport et al ("Davenport" US 2004/0263477 A1)

Claim 15: Davenport discloses a computer readable storing a program as in Claim 14 above but does not explicitly disclose a program that comprises a WINDOWS™ based program configured for execution on a WINDOWS™ based computer. However Davenport does utilize a PC to interact with the invention and **official notice** is taken that windows is one of the notoriously well known operating systems for PC's.

4. Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport et al ("Davenport" US 2004/0263477 A1) in view King et al ("King" US 20030071842 A1).

Claim 9: Davenport discloses a The computer readable medium storing a computer program as in claim 1 above, but does not explicitly disclose comprising program instructions to display a graphical user interface on a display screen of a computer system associated with the computer readable medium, and wherein the graphical user interface is configured to enable a user to graphically define one or more event translators, and graphically link one or more selected incoming input events to one or more translated input events through the one or more graphically defined event translators. However King discloses dynamic and user defined events and further discloses graphically linking events (Figure 15). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention graphically link events in Davenport as taught by King. One would have been motivated to provide a graphical representation to improve operability of the system with visual feedback.

Claim 10: Davenport and King disclose a computer readable medium storing a computer program as in claim 9 above, and King also discloses enabling the user to drag-n-drop selected ones of those incoming input event types into an input event field, and into a translated input event field, and to make desired event translation connections between respective incoming input events in the input event field and respective translated input events in the translated input event field (Page 10, Paragraph 119).

Response to Argument

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherrod Keaton whose telephone number is 571) 270-1697. The examiner can normally be reached on Mon. thru Fri. and alternating Fri. off (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3800.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SLK

1-4-08

/David A Wiley/

Supervisory Patent Examiner, Art Unit 2174